

part 4, the fibers of the fiber bundles 3 are in a condition
in which they are completely unjoined with the base sheet 2,
since no spot-form joining parts 7 are present from the
central joining part 4 up to the end 31a in the direction of
5 flow of the fibers. Also, the fiber bundles 3 between the
other end edge 2b of the base sheet 2 and the central
joining part 4 of the fiber bundles 3 are joined by the
spot-form joining parts 7. The ends 31a, 31b in the
direction of flow of the fibers of the fiber bundles 3 are
10 liberated without being joined with the base sheet 2. The
fibers of the fiber bundles 3 are constituted so as to be
able to move freely in a length from the central joining
part 4 or spot-form joining part 7 up to the tips 31a, 31b.

In this way, in the sheet 1 for a cleaning tool, between
15 the central joining part 4 and the ends 2a, 2b, the fiber
bundles 3 are joined by means of the spot-form joining parts
7 constituting intermittent joining parts, so, when seen
from the direction of flow of the central joining part 4,
the length of free movement of the fibers from the end of
20 the fiber bundle 3 up to the joining part is different in
the portions where a joining part with the spot-form joining
part 7 is provided and in the portions where such a joining
part is absent; in this way, entanglement of the fibers of
the fiber bundles 3 can be prevented.

25 As shown in Figure 2, the spot-form joining parts 7 are
provided directly above lines (parallel lines) 5a, 5b, 6a,

restriction if nonwoven fabric sheet is employed, preferably
the short fibers (fiber bodies) constituting the sheet are
short fibers having thermal fusibility with the fiber
bundles 3. Examples that may be given of such short fibers
5 having thermal fusibility include fibers such as
polypropylene, polyethylene or polyethylene terephthalate
and composite fibers of these of the sheath/core type or
side-by-side type.

Examples that may be given of the nonwoven fabric sheet
10 employed as the base sheet 2 include spun lace nonwoven
fabric, spun-bonded nonwoven fabric, thermally bonded
nonwoven fabric, air-through bonded nonwoven fabrics, or
point-bonded nonwoven fabrics and the like. Spun-lace
nonwoven fabrics, thermally bonded nonwoven fabrics and the
15 like are especially desirable in this case. The nonwoven
fabric sheet that is used may be constructed from a single
sheet, or may be constructed by laminating a plurality of
sheets of the same or different types.

The fiber bundles 3 that are used in the sheet 1 for a
20 cleaning tool are aggregates of fibers that are overlapped
side by side so that numerous fibers are oriented in the
same direction, with the respective fibers being wrapped to
an extent that prevents the fibers from coming undone. The
fiber bundles 3 are formed into sheets and are handled as
25 sheet-form fiber bundles. Also, the fiber bundles 3 may be
partially mutually coupled by thermal fusion or the like.

The fiber bundles 3 may be constituted of fibers of the same type or may be constituted of fibers of a plurality of different types.

5 The fiber bundles 3 may be constituted solely of fibers of the same thickness or may be constituted of fibers of a plurality of thicknesses. Irrespective of whether the fiber bundles 3 are the same or different in respect of the types of constituent fibers and their thickness, they may be constituted of fibers of different colors.

10 For example, natural fibers such as cotton, wool or the like, synthetic fibers such as polyethylene, polypropylene, polyethylene terephthalate, nylon, polyacrylics or the like, composite fibers such as core-sheath type fibers, ocean-island type fibers, i.e. islands-in-the-sea type fibers, side-by-side type fibers or the like are used as the fiber bundles 3. Thermally fusible synthetic fibers or composite fibers are preferable, in particular core-sheath type composite fibers whose core is made of polypropylene and whose sheath is made of polyethylene are desirable since they combine the excellent thermal fusibility of the polyethylene constituting the sheath with the "body" of the polypropylene constituting the core.

20 Also, the fibers that are employed for the fiber bundles 3 may be crimped, being for example mechanically crimped or thermally crimped.

25 Furthermore, the fiber bundles 3 may also be long fiber bundles generally called "tow" that are manufactured from

and/or back surface of the base sheet 2, the outer surface
of this tacky adhesive layer being covered with a peel-off
sheet. If a sheet 1 for a cleaning tool is formed in this
way, when attaching to the cleaning tool 10 for floor wiping,
5 the tacky adhesive layer can be joined at the position of a
stop 13 on the upper surface of the pedestal 12 after
removing the peel-off sheet. It should be noted that, if a
tacky adhesive layer is provided on the attaching parts 8 of
the cleaning tool 10 for floor wiping, attaching could be
10 effected onto the pedestal 12 of a cleaning tool 10 for
floor wiping that is not provided with a fixed member such
as the stop 13. Also, although not particularly shown in
the drawing, it would be possible to provide slits in the
sheet 1 for a cleaning tool for attaching onto for example
15 the pedestal of the cleaning tool in the attaching parts 8,
8, 8, 8 in the vicinity of the two end edges 2a, 2b in the
direction of flow of the fibers of the fiber bundles 3.

The base sheet 2 and/or fiber bundles 3 of the sheet 1
for a cleaning tool according to the present invention could
20 be coated with an agent for enhancing the dirt capturing
ability. Examples of such an agent that may be mentioned
include an oiling agent or the like containing a mineral oil
such as liquid paraffin or the like, a silicone oil or a
nonionic surfactant.

25 Figure 5 is a perspective view showing the external
appearance of an example of a cleaning tool for floor wiping.

laminating fiber bundles 3a of slender fibers onto the base sheet 2 and joining by thermal fusion with the central joining part 4 and spot-form joining parts 7, then joining the fiber bundles 3b of thick fibers with the central
5 joining part 4.

It should be noted that, in the cleaning sheet 1 of the hand-held cleaning tool sheet 20, the positions where the joining parts of the spot-form joining parts 7 that are intermittently formed on parallel lines between the two end edges 2a, 2b parallel with the central joining part 4 are provided is further inwards than the position where the cuts 10 25 are provided i.e. they are formed so as not to overlap the cuts 25.

In the cleaning tool sheet 1 of the hand-held cleaning tool sheet 20 shown in Figure 8, in the same way as in the case of the sheet shown in Figure 1, the spot-form joining parts 7 are formed using two parallel lines respectively provided as parallel lines between the two end edges 2a, 2b that are parallel with the central joining part 4. It would 15 20 also be possible to form the spot-form joining parts 7 using four parallel lines respectively provided as parallel lines between the two end edges 2a, 2b that are parallel with the central joining part 4.

For the base sheet 2 and fiber bundles 3 (3a, 3b) of the hand-held cleaning tool sheet 20, the material indicated by 25 the cleaning tool sheet 1 shown in Figure 1 can be employed.

31 serve for attaching the hand-held cleaning tool sheet 20 and are formed as bifurcated branch members as shown in Figure 12.

In order to attach the hand-held cleaning tool sheet 20
5 on the holding member 30, the legs 31 of the holding member 30 are inserted from the insertion opening 23 of the holding sheet 21 of the hand-held cleaning tool sheet 20 and held in the holding part 22. When the hand-held cleaning tool sheet 20 becomes contaminated, the legs 31 of the holding member 10 30 are extracted from the insertion opening 23 and replaced by another, uncontaminated hand-held cleaning tool sheet 20; in this way an excellent wiping effect is obtained.

The legs 31 for the holding member 30 of the hand-held wiping cleaning tool shown in Figure 12 are formed in a 15 shape obtained by cutting a cylinder in half. These legs 31 are provided with protrusions 33 that protrude outwards from their periphery at four locations having a prescribed interval in the length direction of the upper periphery of their respective branch members.

20 These protrusions 33 are formed as projections protruding such that the radius of the legs 31 becomes larger rearwardly than forwardly; thus they make it possible for the legs 31 to be inserted comparatively smoothly in the case of insertion from the tips of the legs 31 into the 25 holding part 22 of the hand-held cleaning tool sheet 20 but can prevent the hand-held cleaning tool sheet 20 from